



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

646.3511

Job Sheet 213718



Part No: 646.3511

Job Qty: 12 pcs

Part Name: Strut



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/1/20

Job Tracking No:

Due Date: 10/30/20

Created By: Jennifer Renwick

Type: Stock

Description: SIOP

Note: DWG REV N/C 3 IPP REV:A 12.10.19 NEW ISSUE DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Waterjet - Flow - 1	12 pcs		10/29/20	0.17	0.49	Waterjet - Flow		on 20/10/27
120	QC 2	12 pcs		10/29/20	0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		on 20/10/27
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		
							QC 2 - 8		
							QC 2 - 66		
							QC 2 - 64		



Container No: S308724



Part: 646.3511

Job No: 213718

Serial No/Batch: S308724

Revision: N/C

Inspector:

Exp Date:

Instructions: Various STC's

Dart Aerospace Ltd.
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Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 10/29/20

Plex 10/1/20 3:10 PM Dart.Renwick.Jennifer

				QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 2 - 76	
				QC 2 - 86	
				QC 2 - 83	
130	QC 8	12 pcs	10/29/20	0.00 0.00	QC 8 - 12
					QC 8 - 14
					QC 8 - 17
					QC 8 - 20
					QC 8 - 25
					QC 8 - 3
					QC 8 - 32
					QC 8 - 33
					QC 8 - 35
					QC 8 - 39
					QC 8 - 4
					QC 8 - 44
					QC 8 - 45
					QC 8 - 49
					QC 8 - 58
					QC 8 - 8
					QC 8 - 9
					QC 8 - 68
					QC 8 - 67
					QC 8 - 1 (A)
					QC 8 - 47
					QC 8 - 40
					QC 8 - 52
					QC 8 - 23
					QC 8 - 57
					QC 8 - 76
					QC 8 - 61
					QC 8 - 66
					QC 8 - 73
					QC 8 - 82
140	Large Fab - Welded Assy-2-B4B	12 pcs	10/29/20	0.00 4.80	Large Fab - 1 - B4B
					Large Fab - 10 - B4B
					Large Fab - 2 - B4B
					Large Fab - 3 - B4B
					Large Fab - 4 - B4B
					Large Fab - 5 - B4B
					Large Fab - 6 - B4B
					Large Fab - 7 - B4B
					Large Fab - 8 - B4B
					Large Fab - 9 - B4B
					Large Fab - 11 - B4B (Various)
					Large Fab - 12 - B4B
150	QC 5	12 pcs	10/29/20	0.00 0.00	QC 5 - 10
					QC 5 - 12
					QC 5 - 17
					QC 5 - 18
					QC 5 - 19
					QC 5 - 22
					QC 5 - 24
					QC 5 - 3

OCT 27 2020 40
9-89

MV Oct 28/20

					QC 5 - 43	
					QC 5 - 49	
					QC 5 - 51	
					QC 5 - 58	
					QC 5 - 68	
					QC 5 - 9	DAS
					QC 5 - 50	50 10-28-20
					QC 5 - 30	9-89
					QC 5 - 40	
					QC 5 - 61	
					QC 5 - 81	
					QC 5 - 82	
160	Large Fab - Welded Assy-2-B4B	12 pcs	10/29/20	0.00 13.79	Large Fab - 1 - B4B	
					Large Fab - 10 - B4B	
					Large Fab - 2 - B4B	M/ Oct 28/20
					Large Fab - 3 - B4B	
					Large Fab - 4 - B4B	
					Large Fab - 5 - B4B	
					Large Fab - 6 - B4B	
					Large Fab - 7 - B4B	
					Large Fab - 8 - B4B	
					Large Fab - 9 - B4B	
					Large Fab - 11 - B4B (Various)	
					Large Fab - 12 - B4B	
170	QC 9	12 pcs	10/29/20	0.00 0.00	QC 9 - 10	
					QC 9 - 18	
					QC 9 - 24	
					QC 9 - 43	DAS
					QC 9 - 50	50 10-30-20
					QC 9 - 9	9-89
180	QC 5	12 pcs	10/29/20	0.00 0.00	QC 5 - 10	
					QC 5 - 12	
					QC 5 - 17	
					QC 5 - 18	
					QC 5 - 19	
					QC 5 - 22	
					QC 5 - 24	
					QC 5 - 3	
					QC 5 - 43	
					QC 5 - 49	
					QC 5 - 51	
					QC 5 - 58	
					QC 5 - 68	
					QC 5 - 9	DAS
					QC 5 - 50	50 10-30-20
					QC 5 - 30	9-89
					QC 5 - 40	
					QC 5 - 61	
					QC 5 - 81	
					QC 5 - 82	DAS
220	Spray Paint - 2 - B4B	12 pcs	10/30/20	0.00 0.55	Spray Paint - 1 - B4B	41 NOV 01 2020
					Spray Paint - 2 - B4B	9-89
					Spray Paint - 3 - B4B	
					Spray Paint - 4 - B4B	
230	QC 14	12 pcs	10/30/20	0.00 0.00	QC 14 - 15	
					QC 14 - 2	
					QC 14 - 34	
					QC 14 - 41	

					QC 14 - 51	
					QC 14 - 58	
					QC 14 - 59	
					QC 14 - 9	
					QC 14 - 68	
					QC 14 - 40	
					QC 14 - 19	
					QC 14 - 43	
					QC 14 - 24	DAS
					QC 14 - 61	81
					QC 14 - 81	9-89
					QC 14 - 82	
					QC 14 - 87	
					QC 14 - 47	
240	Packaging 3-1 - Stock - B4B	12 pcs	10/30/20	0.00 0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	DAS
					Packaging 3 - 6 - B4B	28
					Packaging 3 - 7 - B4B	9-89
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	NOV 02 2020
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	DAS
					Packaging 3 - 37 - B4B	21
250	QC 21 - SA	12 pcs	10/30/20	0.00 0.00	QC 21 - SA - 21	DAS
					QC 21 - SA - 70	3-89
					QC 21 - SA - 9	NOV 03 2020
					QC 21 - SA - 77	
					QC 21 - SA - 28	NOV 02 2020

Part Op 110 - 1-Cut 646.3500 plate 2.75"x 1.50" as per Dwg
 Descriptions: 120 - QC2- Inspect parts off machine FAI/FAIB
 130 - QC8- Inspect parts - second check

140 - 1- Fabricate tube as per dwg USE DT10290 PUNCH

150 - QC5- Inspect part completeness to step on W/O

160 - Weld per dwg A/R S.S. rod Batch: M139023 - Weld tube to plate as per dwg. DT9867

170 - QC9- Inspect visual per QSI004- Fusion Welds

180 - QC5- Inspect part completeness to step on W/O

220 - Spray Paint / NDT Room - Prime as per dwg (see note 3) 5265778

230 - QC14- Inspect Spray Paint

240 - Identify as per dwg & Stock Location: _____ - ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV***

250 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M304S16GA	304/316 Sheet .063	.3336 sf (.0278 ea)	110-Waterjet - Flow - 1	<u>S301365</u>
M304TR0.500W.049	304 Round Tube .500 X .049W	9.9960 ft (.833 ea)	140-Large Fab - Welded Assy-2- B4B	<u>S233352</u>

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-Waterjet - Flow - 1	M304S16GA	0	175	0
140-Large Fab - Welded Assy-2- B4B	M304TR0.500W.049	10	67	0

Part Specifications

Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Strut	2.750Inches $\pm$ 0.030	2.780 2.720		
2	Strut	1.500Inches $\pm$ 0.030	1.530 1.470		
3	Strut	0.063Inches $\pm$ 0.010	0.073 0.053		

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NOTES:

1 MATERIAL: 6061-T6 ALUMINUM IAW AMS-QQ-A-250/11;
.062" THK.

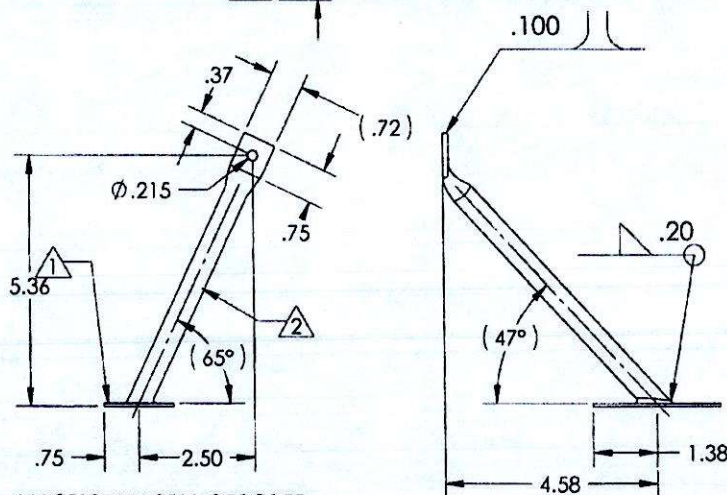
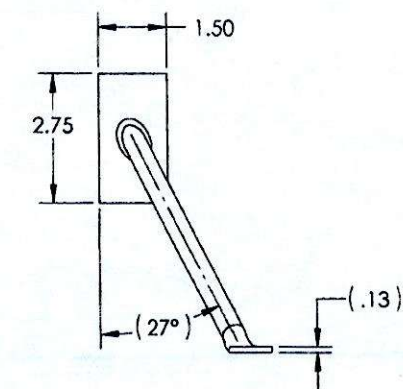
2 MATERIAL: 6061-T6 ALUMINUM IAW AMS-WW-T-700/6
.500" OD; .062" WALL THK

3 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2
COLOR BLACK;
CARDINAL 4860-50 PRETREATMENT PRIMER
PRIME IAW MIL-P-23377J TYPE I CLASS N

4. DEBURR AND BREAK ALL SHARP EDGES

5. WELDS IAW MIL-STD-2219.
TIG WELD WITH FILLER ROD

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 213718



646.3510, 646.3511 OPPOSITE

646.3510 SHOWN
646.3511 OPPOSITE

UNINCORPORATED ECN(s)

02197, 02440, 04274

QTY	FIND #	PART #	DESCRIPTION	MATL	SPEC.
		646.3513	STRUT	△△	△
		646.3512	STRUT	△△	△
		646.3511	STRUT	△△	△
		646.3510	STRUT	△△	△
PARTS LIST					
NEXT ASSY (S)			APICAL INDUSTRIES		
646.4000			2608 TEMPLE HEIGHTS DR.		
			OCEANSIDE, CA. 92056-3512 (760)724-5300		
			STRUT		
			REV. CHG. CODE		
			B D7M26		
			646.3500		
			SCALE: NONE		
			SHEET 1 OF 2		

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread ☐			
Other/Details:					



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CANADA

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Container No: S308724



Part: 646.3511

Job No: 213718

Serial No/Batch: S308724

Revision:

Inspector:

Exp Date:

Instructions: Various STC's

Date: 10/27/20